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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,937	02/08/2001	Seung Kil Kim	001033	4134

7590 07/29/2005  
David E. Bennett  
Coats & Bennett, P.L.L.C.  
1400 Crescent Green, Suite 300  
Cary, NC 27511

EXAMINER

WEST, LEWIS G

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/779,937

Applicant(s)

KIM, SEUNG KIL

Examiner

Lewis G. West

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-16 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Response to Arguments***

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krasner (6,107,960) in view of Kawanami (5,896,563).

Regarding claim 1, Krasner discloses a method for allowing a GPS receiver and a cellular telephone transceiver to share a common antenna (Col. 8 lines 18-30) comprising the steps of: coupling said GPS receiver and said cellular telephone transceiver to said common antenna, and disconnecting said GPS receiver from said common antenna when said cellular telephone transceiver is transmitting. (Col. 7 line 64-col. 8 line 17), but does not expressly disclose connecting said common antenna to ground. Kawanami discloses disconnecting a receiver and switching a common antenna to ground in a communication device. (Col. 5 line 36-col 6 line 3) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to switch a common antenna to ground to prevent reflected waves from the antenna.

Regarding claim 2, Krasner discloses the method of claim 1 wherein said disconnecting step comprises the steps of: providing a signal indicating when said cellular telephone transceiver is transmitting; and providing an electronic switch controlled by said signal to

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selectively disconnect said GPS receiver from said antenna and connect said antenna to ground.

(Col. 7 line 64-col. 8 line 17)

Regarding claim 3, Krasner discloses the method of claim 1 wherein said antenna is a triple band antenna. (Col. 7 line 55-col. 8 line 17)

Regarding claim 4, Krasner discloses the method of claim 3 wherein said triple band antenna is tuned to the transmit and receive frequencies of said cellular telephone transceiver and the receive frequency of said GPS receiver. (Col. 7 line 55-col. 8 line 17)

Regarding claim 5, Krasner discloses the method of claim 1 further comprising the steps of: causing said cellular telephone transceiver to provide a signal to said GPS receiver when said cellular telephone transceiver ceases transmitting; and causing said GPS receiver to begin searching for satellite signals when said signal is received. (Col. 7 line 64-col. 8 line 17)

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krasner (6,107,960)

Regarding claim 6, Krasner discloses, in a cellular telephone having a GPS receiver and a triple band antenna, an improvement comprising: a switch, connecting said GPS receiver and said antenna, wherein said switch disconnects said GPS receiver from said antenna when said cellular telephone is transmitting and means, in said GPS receiver, for delaying the processing of GPS signals until after the cellular telephone transmission is complete. (Col. 7 line 36- Col. 8 line 17) Although not expressly disclosed, it would be known that after a complete loss of GPS signal, which is addressed in Krasner (see Col. 8), that a new search and synchronization with GPS satellites would have to occur. Therefore it would have been obvious to one of ordinary

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skill in the art at the time of the invention to start a search after cellular transmission when GPS signals were not gated in order to prevent intersystem interference.

***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter:

Claims 8-16 are indicated as allowable for reasons stated in the previous official action.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 571-272-7859. The examiner can normally be reached on Monday-Friday 7:00-3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lewis West  
(571) 272-7859



NICK CORSARO  
PRIMARY EXAMINER